

New Palaearctic Butterflies

By Dr. L. G. HIGGINS*

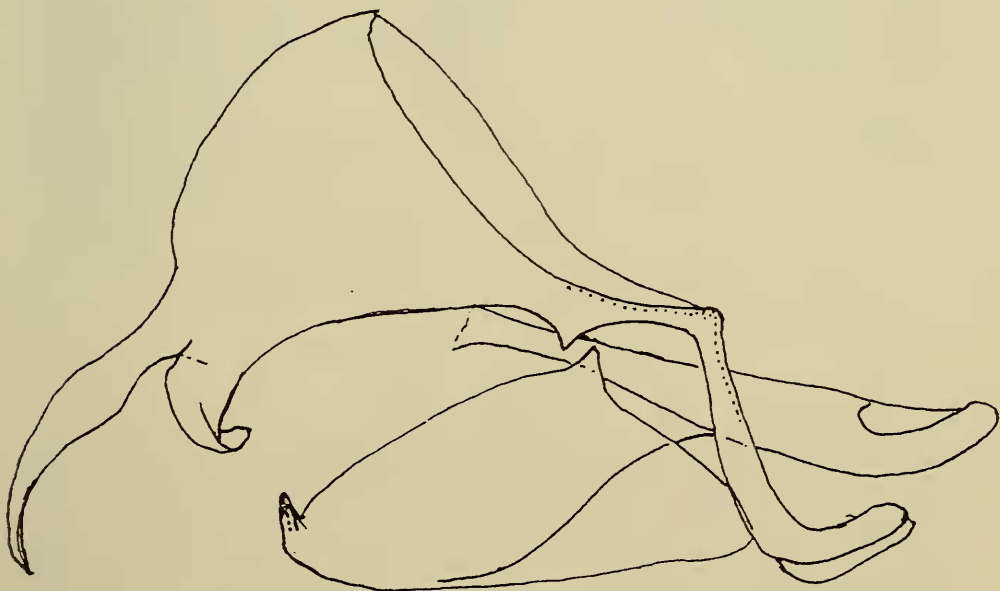
A new subspecies of *Melanargia galathea* L., the spring brood of *Mellicta deione* Geyer and the female of *Melitaea sarvistana* Wiltshire, hitherto unknown, are described and figured.

Melanargia galathea origo subsp. nov. (figures 1-5)

♂ forewing costa 24-25 mm., like *M.g. lachesis* of the small form *alta* Oberthur, upperside white areas extensive, veins lined black, forewing cell-space elongate, black discoidal markings variable, often greatly reduced; hindwing upperside black basal and discal markings vestigial if present; underside veins firmly lined black, forewing black discoidal markings reduced or vestigial, hindwing underside ground-colour faintly yellowish, discal band complete in outline, filled grey in some specimens.

♀ forewing costa 27 mm., upperside similar, ground-colour faintly yellowish, discal band dark grey.

Male genitalia (text figure), like *M.g. lucasi*, in side view brachia shorter and wider, tegumen more steeply domed, vinculum sharply angled at junction with peduncle, valve rather narrow, terminal tooth single.



M. galathea origo ♂ genitalia $\times 50$

Distribution. All specimens were taken by Douglas Cottrill in a single colony in N.E. Iran, about 80 miles east of Gorgan, on June 21st, 1973, altitude 800 m.

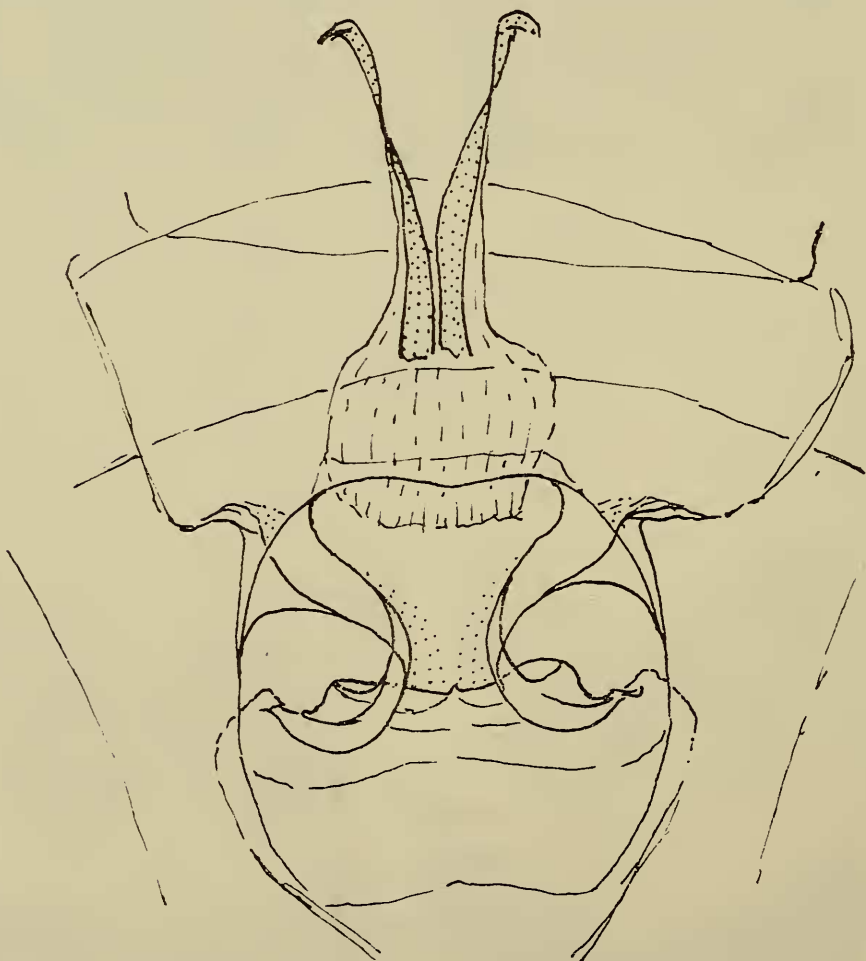
♂ holotype (fig. 1) and ♀ allotype (fig. 2) are now in coll. British Museum (N.H.). Three ♂ ♂ paratypes are figured are in the author's collection; ♂ ♂ and ♀ ♀ paratypes are in coll. D. C. Cottrill.

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Among the subspecies of *M. galathea* so far described, the firmly black-lined wing-veins and the ♂-genitalia of *origo* both recall *M.g. lucasi* Rambur, while on the upperside the elongate forewing cell suggests *M.g. lachesis* Hübner. This last feature is present in many specimens of *M.g. elbursica* de Lesse, but this rather heavily marked form is much closer to *M.g. galathea* in most respects.

Melitaea sarvistana Wiltshire (figure 6, ♀, figure 7, ♂)

This species was discovered in S.W. Iran by E. P. Wiltshire, who described and figured the male in 1941. The female remained unknown until 1972, when specimens were collected by Douglas Cottrill some distance north of Shiraz. The example now illustrated was selected from four of these specimens now in my collection. On both surfaces these scarcely differ from males, with very little variation, but on the forewing upperside the pale postdiscal markings are some-



M. sarvistana ♀ genitalia × 50

times more prominent, pale yellow or white. The ♀-genitalia (text figure) confirm a close relationship with *M. phoebe* Denis & Schiffermüller. Ref.: Wiltshire, E. P., 1941. *J. Bombay Nat. Hist. Soc.*, 42: 473 and figure.

Mellicta deione rosinae Rebel 1911 (figures 7, 8)

Description. Both sexes large, ♂ forewing 23 mm., upperside ground-colour dark fulvous, not unlike *M.d. berisalii* but larger and black markings notably heavier; hindwing upperside has a broad, black area in space 1c and space 2, marginal fulvous lunules well defined; hindwing underside discal and submarginal bands intense, fiery orange-red. ♀ forewing 25-26 mm., similar to ♂ but larger, forewing upperside post-discal band slightly yellowish in three specimens, but colour contrast little developed in this series, although sometimes present in females in another series from the same area. Described from 2 ♂♂, 6 ♀♀ taken by Mr. H. J. Henriksen (Denmark), on April 19th-27th, 1972 in the Serra da Monchique, Algarve, S. Portugal. These specimens represent the first generation; specimens of the second generation from this locality have not been seen. Because of their large size and dark appearance they are hard to recognise as a form of *M. deione*, and at first sight I thought they might deserve description as an undescribed subspecies. *M.d. rosinae* was described by Rebel from specimens bred from larvae found in April at Cintra, north of the Tagus; the butterflies emerged in July, i.e. second generation. Males are of average size, forewing 17-18 mm., upperside rather dark fulvous and heavily marked, but unlike the large specimens taken by Mr. Henriksen. Specimens of the first brood from Cintra have not been seen. I believe now that the large April specimens must represent the first generation of *M.d. rosinae*. These, with their striking characters so unlike all other known subspecies of *deione*, need this short description and illustration. Mr. Henriksen has kindly presented male and female specimens to the British Museum.

HELINA PROTUBERANS ZETT. (DIPT.: MUSCIDAE) NEW TO KENT AND S.E. ENGLAND. — A ♀ *Helina* of a species unfamiliar to me, taken at Sandwich Bay, E. Kent (8.vi.66), later turned out to belong to this local sandhill-frequenting species — a determination for which, among hundreds of others, I am indebted to the kindness of my friend Mr. E. A. Fonseca. The present capture would seem to constitute a new record not only for Kent but for south-east England as a whole, since the distribution given by Fonseca (1968, *Handb. Ident. Brit. Ins.*, 10 (4b): 45) includes no county nearer than Hants. and Norfolk. *H. protuberans* seems thus to have a strong western bias in the south, extending to Cornwall and Anglesey; its distribution is somewhat reminiscent of that of another insect with a similar habitat, namely the tiger-beetle *Cicindela maritima* Latr. & Dej., which also occurs nowhere else in Kent (or the whole south-east sector?) but at Sandwich Bay. — A. A. ALLEN, 49 Montcalm Road, Charlton, London, SE7 8QG.